3.   (Amended) The method [Method] according to claim 2 in which the switch segmentation [takes the form of] is a simulation of a training time series of the system or of the time series to be investigated with several, competing prediction models.

In Claim 4, line 1, please change "Method" to --The method--.

In Claim 5, line 1, please change "Method" to --The method--.

In Claim 6, line 1, please change "Method" to --The method--.

In Claim 7, line 1, please change "Method" to --The method--.

8.   (Amended) The method [Method] according to [one of the preceding claims] Claim 1 in which the series of mixed prediction models g_i is detected by determining a prediction for each time increment with each of the possible prediction models, resulting in a time-dependent prediction matrix from which a mean prediction error for randomly selected segmentations can be derived, whereby the sought series of mixed prediction models g_i is the segmentation with the smallest prediction error or the maximum probability.

In Claim 9, line 1, please change "Method" to --The method--.

10.   (Amended) The method [Method] according to [one of the preceding claims] Claim 1 in which drift segmentation is followed by an additional step to reduce the number of prediction models used for modeling where the number of prediction models is reduced sequentially, associated with a determination of the mean prediction error, until a further reduction of the number of prediction models means an increase in the prediction error.

11.   (Amended) The method [Method] according to [one of the preceding claims] Claim 1 in which the time series of at least one of the system variables x(t) comprises a time series of physiological parameters described by the Mackey-Glass delay differential equation $dx(t) / dt = -0.1x(t) + 0.2x(t - t_d) / 1 + x(t - t_d)^{10}$.

12.   (Amended) The method [Method] according to [one of the claims] Claim 1 [through 11] in which the time series of at least one of the system variables x(t) comprises

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